

moderate winds were recorded by vessels in the immediate vicinity, while moderate to strong gales prevailed over a portion of the steamer lanes, accompanied by comparatively high pressure. During the next 24 hours this disturbance moved northeastward along the coast, as on the 6th the center was near Nantucket, the weather conditions having changed but little. The disturbance continued its northeasterly drift and on the 7th was off the west coast of Newfoundland. At the same time there was a second low over the North Sea, and heavy weather was experienced over the greater part of the ocean north of the 40th parallel. The storm log from the British S. S. *Stanmore* is as follows:

Gale began on the 6th; position 42° 24' N., 67° 52' W. End of gale on the 7th. Highest force of wind, 10; shifts of wind, S.-W.

From the 8th to the 12th moderate weather with high pressure was the rule over the greater part of the ocean, although on the 11th and 12th moderate gales were reported over a limited area between the 20th parallel and the European coast.

By the 13th the storm area had extended to a considerable extent, reaching as far west as the 35th meridian, and there was a second disturbance central near the Virginia Capes, with southerly gales along the American coast between Nantucket and Charleston.

On March 14, as shown on Chart IX, this disturbance had increased considerably in intensity. Ireland was also surrounded by a well-developed low, and strong westerly gales covered the eastern and western sections of the steamer lanes.

Chart X for March 15, shows that both of these disturbances had decreased in intensity during the next 24 hours, as by the 15th the storm area had contracted in area, and comparatively few reports of gales were

received. The storm log from the American S. S. *American Star* is as follows:

Gale began on the 12th. Lowest barometer 29.24 inches at 6 p. m. on the 13th; position 38° 20' N., 71° 17' W. End of gale on the 15th. Highest force of wind, 10; shifts of wind, SW.-W.

From the 16th to the 23d conditions over the ocean were comparatively featureless, although on the 21st a few reports were received denoting moderate gales between the 40th and 45th parallels and 55th and 63d meridians.

Charts XI to XIV show the wind and weather conditions during the period from the 24th to the 27th, both inclusive, with the nearly stationary storm area over the mid and eastern sections of the steamer lanes. The observer on the Belgian S. S. *Egalantier* states in the storm log:

Gale began on the 23d. Lowest barometer 29.80 inches at 9:30 a. m. on the 24th; position 45° 02' N., 35° 19' W. End of gale on the 28th. Highest force, 12; shifts of wind, N.-W.-NW.

On the 25th a few vessels between the 48th and 53d parallels and the 20th and 25th meridians encountered severe northerly gales, while light to moderate winds prevailed over the remainder of the ocean, except that one vessel about 200 miles north of Bermuda reported a westerly wind of about 50 miles an hour. This disturbance must have been very local in its character, as all other vessels in that vicinity encountered moderate winds.

The observer on the British S. S. *Pannonia* reports as follows:

On March 31, at 2 a. m. (G. M. T.), in latitude 37° 20' N., longitude 65° 30' W., we encountered a cyclonic squall. The water was boiling and whirling in several places, the highest spiral being about 40 feet above the water. A strong westerly wind, force 9, was blowing at the time, with a rough sea and steady barometer of 29.94 inches. Cumulus and cirro-cumulus clouds.

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

Nova Scotia.—Halifax, March 2.—Arctic ice packs, literally black with walrus, seals and other polar creatures, are the largest within memory, according to reports * * * [of] sailors and overland travelers.

The solid ice extends farther south than at any time within years, with the bays and inlets fringing the Newfoundland coast locked tightly.

Newfoundland is ice bound and railroads are completely tied up. Inhabitants in the interior are suffering intensely.—*Chicago Evening Journal*, March 2, 1920.

Cuba.—Habana, March 21.—A heavy downpour of rain accompanied by a hailstorm of unprecedented violence swept over the city this afternoon, flooding houses in the lower sections of the city, paralyzing street car traffic for nearly two hours and causing numerous minor accidents and loss of small craft in the harbor.

* * * The hailstorm, the first in sixteen years, is said to have been the heaviest and the hailstones the largest ever seen here.—*Washington (D. C.) Evening Star*.

British Isles.—Like the three months which preceded it, March was notable for its unusual mildness. * * * During the greater part of the month there was a preponderance of winds from westerly or south-westerly quarters, winds which were, moreover, frequently accompanied by copious precipitation in the form of snow, sleet, hail and rain. * * * A striking feature of the month was the frequency of warm days; at Kew Observatory, for instance, the maximum

temperature was between 55° F. and 66° F. on 16 occasions, and fell below the normal on only five days. * * * The general rainfall expressed as a percentage of the average was: England and Wales, 150; Scotland, 137; Ireland, 129. In London (Camden Square) there was frequent but light rain. The mean temperature was 46.7° F., or 4.6° above the average, being the highest value recorded for March during the 63 years' record.—*The Meteorological Magazine*, April, 1920, p. 51.

Baltic region.—In western Europe March was not so disturbed as February, but in the British Isles and eastward into the Baltic the weather continued unusually warm, and at Helsingfors and Reval the sea was unusually free from ice. Early in the month a gale in the Baltic caused loss of life.—*The Meteorological Magazine*, April, 1920, p. 56.

Mediterranean.—Paris, March 27.—Two French steamers * * * have been missing since the recent hurricane over the Mediterranean, and it is believed they were lost with all hands [42] * * *.—*New York Evening Post*, March 27, 1920.

Near East.—The cold and stormy conditions of February in the Near East continued into March, with an intensity unequalled for many years, culminating about the 9th in a hurricane in the Black Sea, which destroyed an American Red Cross steamer, with the loss of 500 invalided soldiers.—*The Meteorological Magazine*, April, 1920, p. 56.